

## **Version**

Product: FDOT CADD Software

Version: FDOTSS4, version 01.04.00

Date: October 6, 2017

# **Acronyms**

CADD - Computer Aided Drafting and Design FDOT - Florida Department of Transportation

## **Software Version Notification**

FDOTSS4 version 01.03.00

# FDOTSS4 Maintenance Release (MR) 4

This Maintenance Release includes fixes of issues reported since the release of FDOTSS4 MR3 Hotfix 01.

# FDOTSS4 Maintenance Release (MR) 4

FDOTSS4 MR4 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR4 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions sense Maintenance Release 3, Aprril 3,2017.

- Revised MasterStandards.xlsx added 8 inch options for Rumble Strips with new Levels (RumbleStrip3 & RumbleStrip4),
   LineStyle/LineType (PM-RumbleSolid8in & PM-RumbleSkip8in) and updated Description to reflect option size.
- Updates to ddb
- Added Overbuild Style Sheets
- Add Erosion Control Levels
- CAiCE Revise feature descriptions to match master standards
- Create3DDeliverablesData.xml Changed Corridor to Model.
- FDOTSSS4.ddb Deleted items valid through 6/30/17 (or before); Coordinated item descriptions with BOE.
- Standards.xml Revised version to FDOTSS4 MR4 (Version: 01.04.00)
- StructuresPayItemStandardBuilder.exe Updated standards release date
- Updated to use web based help
- Changed to web address to production address
- Added Structures Standards Packager link and Help file link. Made all the help file link icons "?" consistent with all the other bar pull-downs.
- Need to correct new Endgangered Species levels to be consistent:
- Lv# Level Name
- 1204 EndangeredL change to: EndangeredL\_ep
- 1205 EndangeredP change to: EndangeredP ep
- Need to correct new Endgangered Species levels to be consistent:
- <u>Lv#</u> <u>Level Name</u>
- 1204 EndangeredL change to: EndangeredL\_ep

- 1205 EndangeredP change to: EndangeredP ep
- Need two new Survey Levels for the two new Feature Codes for Endangered Species. Level to apply to TOPORD and SURVRD Rules.

•	Lv#	Level Name	Description	Co	Style	Wt	Feature Code	Zone
•	1204	EndangeredL	Endangered Species Line	4	2/DGN2	2	ESL	1
•	1205	EndangeredP	<b>Endangered Species Point</b>	4	0/Continuous	1	ESP	1

- Added 1204, 1205 (ESP, ESL) to SURVRD level filter.
- Added Endangered Species levels EndangeredL ep, EndangeredP ep (1204,1205)
- Embed MR4 Survey feature tables.
- ADD Feature Codes ESL, ESP (Endangered Species Line/Point)
- Added ESL, ESP (Endangered Species Line/Point) feature codes.
- Added folder of new FDM Templates
- Added ESP (Endangered Species Point) cell
- Added 1204, 1205 (ESP, ESL) to TOPORD level filter.
- Update CAiCE with latest MR4 seed files.
- Added back in to the Project Explorer>Survey Tab Survey Zone Filters.
- Added ESP (Endangered Species Point) and ESL (Endangered Species Line) point and chain feature codes to TOPORD theme.
- Added Endangered Species Point cell (Temporary)
- Added USHLDER to the Civil Cell Entrance Ramp\_Single Lane\_Parallel Type
- Minor reposition of various cell origins.
- Revise SSP level SpanWire ep to SpanWireP ep
- Added and revised Right of Way level filters to MR3 standards.
- Corrected Pay Items and Descriptions to coordinate with BOE.
- Deleted Exit Gore Signs, Motorist Aid Call Box, Delineators.
- Added shoulder curb to Entrance ramp taper type
- Update Ramp Civil cells with shoulder curb and renamed civil cells
- Updated 306-4, 306-5, 306-6 with Curb Type E or F according to the FDM Exhibit and to run quantities
- Deleted Exit Gore Signs from Ground Mount > Single or Multi-Post.
- Deleted Delineator and Motorist Aid Call Box from Ground Mount.
- Added Relocate section to Overhead > Static Sign Structure.
- Disabled Length and Area in Overhead > Static Sign Structure > Remove section.
- Deleted Delineator from Panel Only section.

- Made Sign Type NA for all Electronic Display Mounting options for Relocate and Remove Sign State.
- Deleted Replace Beacon from Electronic Display.
- Deleted Sign Only Existing, Structure Existing, Pedestal, Span, and Cantilever Mounting options from Dynamic Message Signs (These are all covered in the other options).
- Separated out the proposed Furnish and Install in Internally Illuminated Signs > Signals > Proposed into Furnish and Install Ground Mount and Furnish and Install Overhead Mount.
- Removed duplicate levels found in the Common and Roadway Level Libraries. If needed must attach these libraries to access. Levels will still pass in the spst10 rule file.
- Added civil cells for ramps
- Single Ramp with 3 Thru Lanes
- Double Ramp 3 Thru Lanes with Aux Lane
- Taper Type Entrance Ramp
- Parallel Type Entrance Ramp
- Changed RS-014 to RS-114A, Removed R03-08, Removed R03-10B
- Make FDOT Template active when opening Create Template dialog box. Was opening with driveway template as active after previous edit.
- renamed FDOT\_DirectionalMedianOpening.dgnlib to FDOT\_DirectionalMedianOpenings.dgnlib to follow the naming convention no changes were made to the civil cells
- Place a Blank.dgn file in the AppData\Local\Temp\ folder
- Corrected PLNT level to LandscapeBordr\_ep. Added TALR feature (Turn Arrow Left or Right).
- Removed Common Levels #124 and #125 erroneously entered in the fdot v8 levels.dgnlib
- Updated TS Sheets to remove signature blocks and added separate signature sheet as requested in Innovators email.
- Updated CADPilot Menu Program folder(FDOTSS4\Menu\Program\) to work with Windows Creators Update 1703.
- Updated level numbers for levels:
  - o GSBWFill 2811 to 7503
  - o GSColorFill 2812 to 7504
  - o GSDims 2813 to 7505
  - o GSOutline 2814 to 7506
  - o GSSign 2815 to 7507
  - o AdhocPoint dp 201 to 101
  - o PlotBorder dp 216 to 150
  - o TextNotes 310 to 213

- Viewport 450 to 300
- Removed level Monument ep and moved to Survey Levels.dgnlib
- Corrected level numbering and filters (dsgnsg, dsgnsp, gswksp, itssp, rdxssp)
- Added help menu link to the County General Highway Maps link.
- Corrected attribute and adhoc for guardrail end treatment pay item 536-85-28.
- Change old ClipBorder level In RWCLIP Model to ClipBorder\_dp to be consistent with Roadway Design.
- Initial folder creation to hold Geopak Drainage addins to replace VBAs
- Added new preference for labeling existing ground elevation on cross sections.
- Corrected Line Style settings for levels: LARWLine, EaseTempLine ep, GISROWCntyLine, & GISROWCtyLine

# FDOTSS4 Maintenance Release (MR) 3

FDOTSS4 MR3 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR3 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions sense Maintenance Release 2, February 9,2017.

- Added new drainage features for FDOTSS4 MR3
- Changed "Digital Signature" to "Signature Sheet" for all SignXX.dgn files
- Level Tables\_dp moved to Common Library in previous change. Mark old entry with "D" for deletion in all applicable rules.
- Updated to FDOTSS4 MR3 cells. (Note SYENG SS4.CCL and RWENG SS4.CCL are identical files with different names).
- Per John Hazlip correct Line Styles for the following Survey Levels:
- 1046 GovQtrSectCnrEW\_ep change line style to: 0
- 1047 GovQtrSectCnrNS ep change line style to: 0
- 1405 DrainGrate\_ep change line style to: 1
- Per John Hazlip: We need to lower the DrainGrate\_ep line style from 3 to 1.

- Revert to previous version as directed by Roadway Design Office, until changes can be vetted and coordinated with PPM.
- Corrected typo in description of Paint Guide Lines 0710 11241 to use / instead of -.
- Updated all Roadway MicroStation Level Filters to reflect the changed from the Survey Feature Code and Level restructuring.
- Removed duplicate entries
- Updated all Roadway Level Filters to reflect the changed from the Survey Feature Code and Level restructuring.
- Added FDOTSS4 MR3 New Feature Codes.
- Attached FDOTSS4 MR3 Survey Features with New Features for MR3.
- Added element templates for existing right and left guardrail crossing point features.
- Updated Existing Guardrail feature definition to place guardrail cell in cross section view for left and right existing guardrail
- Added MR3 Cells for New Point Features.
- Revised all Drainage cell levels to DrainMisc\_ep
- Added back Survey level: 1250 Wetland\_ep Wetlands (Existing)
   1 RD-Wetland-Existing RD-Wetland-Existing
- Added back level: Wetland\_ep Wetlands (Existing) 1
   RD-Wetland-Existing RD-Wetland-Existing 0
- Updated 3D guardrail linestyle height from 7' to 6.5'
- Updated Element Template EX OFOE level from FOEElecAer ep to FOEAer ep
- Updated Element Templates EX\_BFOE\_B level from FOEElecBurB\_ep to FOEBurB\_ep
- Updated Element Templates EX\_BFOE\_C level from FOEElecBurC\_ep to FOEBurC\_ep
- Updated Element Templates EX BFOE D level from FOEElecBurD ep to FOEBurD ep
- Update Feature Definitions Corridor Component Features > Existing\_ex level from FOEElecBur\_ex to FOEBur\_ex
- Update Feature Definitions Corridor Component Features > Proposed px level from FOEElecBur px to FOEBur px
- Made adjustments to guardrail components to so 3d linestyles appear in right locations.
- Updated menu to remove Report of Core Borings from XML file which is no longer supported by UofF.
- Updated Temp Barrier Wall cell levels from WallTempBarrier to TempBarrier. Per level changes to Master Standards
- Updated Temp Barrier Wall cell levels from WallTempBarrier\_px to TempBarrier\_px. Per level changes to Master Standards
- Level FlowLine ep set new Line Style to RD-FlowLine
- Added old existing survey level DrainMisc\_ep removed in error and added back to rules survrd and drexrd.
- Added FDOTSS4 MR3 Cells. SYENG\_SS4.ccl
- Restructuring of Survey Feature Codes and Levels for levels PoleElec\_ep, PoleElect\_ep, Tower\_ep, SanitaryFM\_B\_ep, SanitaryFM\_C\_ep, and SanitaryFM\_D\_ep.
- Revised existing database items to update affected item levels based on new and/or revised Survey level changes. Added the following items based on Survey level additions: ESB Electric Service Box (Large)EGASTM Gas Test & Miscellaneous ETELSB

Telephone Service Box (Large) Split EABGV Vaults Above and Below Grade into two items: EAGV Vaults Above Grade EBGV Vaults Below Grade

- Updated some cell levels to coincide with newly created survey levels.
- Restructure of the Survey Feature Codes and Levels
- Renamed Temporary Barrier Walls to exclude the word "Wall":
  - o WallTempBarrier Rename to: TempBarrier
  - WallTempBarrier px Rename to: TempBarrier px
- Removed Structures Feature DGNLIB because they were out of date and not being used.
- Restructuring of Survey Feature Codes and Levels
  - o Moved common levels from Roadway, Right of Way and Survey libraries to Common library
  - o Create new levels unique to each existing feature code
  - Create new feature codes with new levels
  - Delete obsolete feature codes and levels
  - Create 4 new Range numbers: Survey/Topo (1000-1399); Survey/Drainage (1400-1499); Survey/Utilities (1500-1784); Survey/Software Only (1785-1799)
  - o Resorted per range specification and renumbered Survey Library levels
  - Save changes in survey\_levels.dgnlib to backup file survey\_levels.csv
- Restructuring of Survey Feature Codes and Levels
  - o Moved common levels from Roadway, Right of Way and Survey libraries to Common library
  - o Moved 200 Range numbers to Survey, Resorted ROW levels and renumbered into new range (1800-1999)
  - Save changes in rwlevels.dgnlib to backup file rwlevels.csv
- Restructure of Survey Feature Codes and Levels
  - Moved shared levels to the Common level library
  - Renamed Fiber Optics Electrical levels:
  - o FOEElecAer to FOEAer
  - o FOEElecBur to FOEBur
  - FOEElecBur\_ex to FOEBur\_ex
  - FOEElecBur\_px to FOEBur\_px
  - o Corrected level ValveWaterNP description
- Restructuring of Survey Feature Codes and Levels
  - o Moved common levels from Roadway, Right of Way and Survey libraries to Common library

- Renamed GIS Levels
- o Resorted and renumbered Common Library levels
- Added the following pay items:
  - 0711- 11-102 THERMOPLASTIC, STANDARD, WHITE, SOLID, 8" FOR INTERCHANGE AND URBAN ISLAND
  - o 0713-103-102 PERMANENT TAPE, WHITE, SOLID, 8" EXIT LANE AT INTERCHANGE ON CONCRETE PAVEMENT
  - o 0713-103-103 PERMANENT TAPE, WHITE, SOLID DROP LANE MARKING, 12" FOR CONCRETE BRIDGES
- Added existing Level to following rules and updated filters to be in sync with MasterStandards.xlsx

0	Rule File	Level No.	Level Name
0	dsgnsg	7590	PMStripeRumbleCL
0	dsgnsp	7590	PMStripeRumbleCL
0	itssp	7590	PMStripeRumbleCL
0	qtdsrd	7590	PMStripeRumbleCL
0	rdxssp	7590	PMStripeRumbleCL
0	tcdsrd	7590	PMStripeRumbleCL
0	typdrd	7590	PMStripeRumbleCL

- Updated the filters: dsgnsg dsgnsp itssp qtdsrd rdxssp tcdsrd typdrd to be in sync with masterstandard.xlsx
- Revised templates to match pay items in the .ddb/D&C manager
- Changed website link text from "Turnpike Traffic Plans Guide Drawings Website" to "Turnpike Handbook (TPPPH) Guide Drawings" because the user must click on the TPPPH link on the linked page to get to the Guide Drawings and it cannot be linked directly.
- Removed unnecessary symbol groups and corrected display title from "Boring Log Generator" to "WELD Help". Left spaces for referenced examples, but corresponding images not yet located.
- Replaced structures cell library with missing (17743) and revised (21800) cells. Intended November 2016 release changes were as follows:
  - Updated 17743 Standard Mast Arm Assemblies Data Table
  - o Updated 20900 Approach Slab Table of Dimensions
  - o Deleted 20910 Approach Slab Index No. 20910 Table of Dimensions
  - Updated 21800B Post-Tensioning Bar Data Table
  - o Updated 21800T Post-Tensioning Tendon Data Table
  - o Added 22440-CSPC Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall, Cantilever Data Table
  - o Added 22440-CSPDA Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall with Dead Man Anchors Data Table
  - o Added 22440-CSPSA Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall with Prestressed Soil Anchors Data Table

- Renamed Level SedimentBarrier Style/LineType settings SWP-SilkFence / SWP-HayBales to SWP-SedimentBarrier and updated Description from "Synthetic Bales and Staked Silt Fences" to "Synthetic Bales, Staked Silt Fences, etc
- Renamed Level InletProt Style/LineType setting SWP-RockBags to SWP-InletProt and updated Description from "Rock Bags and Sand Bagging" to "Rock Bags, Sand Bagging, etc."
- Renamed Style/LineType SWP-SilkFence to SWP-SedimentBarrier and updated Description from "Synthetic Bales and Staked Silt Fences" to "Synthetic Bales, Staked Silt Fences, etc."
- Renamed Style/LineType SWP-RockBags to SWP-InletProt and updated Description from "Rock Bags and Sand Bagging" to "Rock Bags, Sand Bagging, etc."
- Removed Linestyle SWP-HayBales
- Renamed SWP-SiltFence to SWP-SedimentBarrier
- Renamed SWP-RockBags to SWP-InletProt
- Updated DDB (Erosion Control > Sediment Barriers > 0104 10 3)
- Modified the calculate item Removed the Supplemental Search for the Silt Fence CLS and added the adhoc attributes DESIGN NOTES & SORTBY
- Deleted the 2 default items HayBales & SiltFence
- Updated database to remove item for pay items blocked as of 12-31-16. Reorganized items for new "effective" items as of 1-1-17 to remove the extra folder.
- Updated the column designations for the pay items to match the update to the xlsx file and the Design Notes column.
- Deleted columns for old special post pay item (536-7), install & relocate pay items for bridge anchorage assembly/approach transition to rigid barrier (536-8-31, 32, 33, 41, 42, 43) and replace reflector pay item (536-10-401 no longer in DQE) Modified columns for 536-8-61, 62, & 63 to 30, 40, & 60 to represent the install, relocate & remove options with B=0 per DQE.) corrected pay item number for bridge anchorage assembly relocate (536-8-3 not 2)
- Updated the Guardrail Features to match the items in the DDB. (Removed obsolete items and moved new items from "Effective" folder to the Guardrail folder. Deleted the "Effective" folder.)
- Updated the Syeng cell webpage:
  - o Removed cells: REG, STATRN, TA, WIN
  - Added cells: AHEAD, BIKE, BIKELN, BUS, HUMP, LANE, MERGE, ONLY, RXR, SCHOOL, SIGNAL, SLOW, STOP, TALR, TURN, WIM, WIELD, ZONE
- Added print styles for 8.5x11 and 8.5x14 to FDOT PDF print styles.
- Added 8.5X11 8.5X14 sheet sizes to driver
- Removed Concrete Traffic Railing with Junction Slab pay item columns (521-8-A). These items go on the bridge & should be included on the Summary of Structures Quantities.

- Modified the cell EndTreatDoubleFace by removing the "rounded" end. The Design Standards group were asked to show the
  approach terminals and trailing anchorage differently in the standards to make it easier to determine which one is being
  shown in the indexes. The cell has been modified so that the approach treatment is shown with a flat end and the trailing
  anchorage is shown as rounded. The description was also modified for clarity.
- Added new Guardrail End Treatment pay item (536-85-28 Double Face Trailing Anchorage)
- Added Mast Arm Pole & Arm items to place cells.
- Added mast arm luminaire cell and double checked levels on all the new cells.
- Modified the pay item columns to match updated XLSX. Adjusted Design Notes column.
- Modified Descriptions for End Treatments. Added columns for End Treatment (Double Face Type II Trailing Anchorage)
- Added new mast arm pole and arm cells to go with new indexes.
- Structures File Name: strborder changed File Group to PLANS SHEETS
  - Moveable Bridge Structures File Group corrected Control File to MECHELEC and identified the File Groups for Bascular Pier and Bascular Span
  - o Added missing File Name: B#BL-ArmJointDet
- Correct the strborder file name to be located under the PLANS SHEET section.
- Revised the PavementExisting feature and Element template to use the new level name.
- Added structure for new pay items for Mast Arms, Light Poles, High Mast Poles, and Luminaires for Mast Arms. (Still need new cells for Mast Arms & Luminaires) Deleted Existing Conduit item from Signalization > Conduit category.

# FDOTSS4 Maintenance Release (MR) 2

FDOTSS4 MR2 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

FDOTSS4 MR2 will also implement two significant changes for the CADD Office and for FDOT.

Engineering \ CADD Systems Office (ECSO) has been merged with the Production Support Office. Engineering \ CADD Systems Office will now be referred to as the Production Support Office | CADD or more generally instead of ECSO we will just use CADD. As part of the rebranding effort we tried to update all references to Engineering \ CADD Systems Office or ECSO. As part of the rebranding effort the <a href="mailto:ecso.support@dot.state.fl.us">ecso.support@dot.state.fl.us</a> email address for support requests is being replaced with cadd.support@dot.state.fl.us.

2. FDOT's web addresses will be changing after close of business October 7<sup>th</sup>. All web links in FDOTSS4 MR2, including the help files, have been updated to use the new addresses. More information about the change in web addresses is available here: <a href="http://infonet.dot.state.fl.us/domainchange/questions-staff.pdf">http://infonet.dot.state.fl.us/domainchange/questions-staff.pdf</a>

This is the **FDOTSS4** Maintenance Release 1 (MR1) Hotfix 2 CADD Software Suite. The FDOTSS4 MR1 Hotfix 2 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845. This Hot Fix is intended for the Structures workspace and includes updated and new cells related to the creation of Key Sheets as defined in <u>Roadway Design Bulletin 16-03</u>, cells for the single slope traffic railings and updates/corrections to the links on the FDOT Menu. The cells for the single slope traffic railings are developmental and provided as a courtesy as cells only.

#### FDOTSS4 version 1.1.1

This is the **FDOTSS4** Maintenance Release 1 (MR1) Hotfix 1 CADD Software Suite. The FDOTSS4 MR1 Hotfix 1 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845. This Hot Fix is intended to address Roadway Design Bulletin 16-03 regarding Key Sheet changes.

#### FDOTSS4 version 1.1.0

This is the **FDOTSS4** Maintenance Release 1 (MR1) CADD Software Suite. The FDOTSS4 MR1 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845.

#### FDOTSS4 version 1.0.0

This is the original release of the **FDOTSS4** CADD Software Suite. The FDOTSS4 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845.

Bentley SELECT subscribers can download the specified versions of Bentley software from the Bentley SELECT Website.

If your client or local workstation installations do not have the previously mentioned software versions required by the FDOTSS4 Release already installed, DO NOT install this FDOTSS4 CADD Software Release.

The FDOTSS4 Release is specifically designed for these versions, and will not operate properly on any other versions. Also, the FDOTSS4 Release has been certified on and is designed to be used with Windows 7.

Other versions of the Windows Operating System have not been tested and may not work.

## **Installation Overview**

The FDOTSS4 Suite can be installed in two configurations.

1. Server/Client configuration is ideal for sites with multiple computers. In this configuration a FDOTSS4 directory is installed on a server with the clients accessing the FDOTSS4 resources from the server. This allows the administrator to update the FDOTSS4 resources on an unlimited number of clients by just updating the server.

**Note** This configuration is done through two installations. First the FDOTSS4 Server must be installed and then the FDOTSS4 Client software can be installed on the client computers.

2. *Stand-Alone Workstation* configuration should only be used when a computer will not always have access to the server, such as a laptop, or when a network is not always present. This configuration has been provided to create the FDOTSS4 directory locally and configure MicroStation to access the FDOTSS4 software locally.

## **System Requirements**

- Microsoft Windows 7
- 32 bit or 64 bit Operating Systems
- Microsoft .NET Framework 3.5
- Microsoft Office 2013 (can be configured for Office 2003, 2007 or 2010)

PowerGEOPAK 08.11.09.845 -or- MicroStation 08.11.09.714 and GEOPAK Suite 08.11.09.845

• CAiCE Transportation 10 sp7 (optional)

## Recommendations/Requirements for Client/Server Deployment

A Server/Client installation is the recommended method of installation for the FDOTSS4 CADD Software platform. This will require that Microsoft .NET Framework Security be configured to allow applications to be run from the server.

For instructions on the configuration of .NET Framework, please see:

http://communities.bentley.com/communities/user communities/fdot cadd support/f/343080/t/71583

#### Other Installation Notes about FDOTSS4

To properly install the software on a server, or stand-alone workstation installations, you must have administrator privileges. This is necessary for the install to write to the registry, create shortcuts in the appropriate directories, and to add dll files. (Please see the SOFTWARE VERSION NOTIFICATION section of this file for details on supported and certified versions of MicroStation, GEOPAK, and Windows Operating System.)

The software will set system environment variables:

- "FDOTSS4\_SERVER" This variable points to the location of the FDOTSS4 Server directory for a Client/Server installation or to the Local Workstation install if a Workstation installation is performed.
- "FDOTSS4\_Local" This variable points to the location of the FDOTSS4 directory on the local machine. Specifically points to location of standalone apps for client.
- "FDOTSS4\_Projects" This variable points to the location of the configured projects directory.

The Client and Workstation Installation programs will also set the Following registry entries:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\Platform\DataPath
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\Platform\ProgID
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_LOCAL
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_PROJECTS
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_SERVER
```

*Note* The Server Installation doesn't set any registry entries or environment variables on the server.

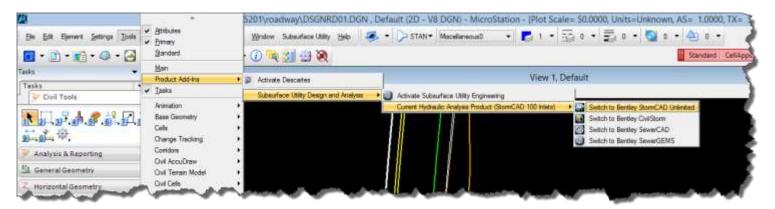
The FDOTSS4 Client installation creates a local folder named \FDOTSS4. The FDOT software utilizes the client folder for files, generally preferences; that have to be accessed by the user for modifications. Once an application is run in one of FDOT's workspaces, the local client folder is populated with any file that is necessary for the user or application to modify.

If the path to the \FDOTSS4 directory changes, it is best to reinstall the Clients so the new path is recorded properly in all of the necessary places. It is not recommended to modify the UCF file, since applications other than MicroStation use this information to locate the \FDOTSS4 Directory.

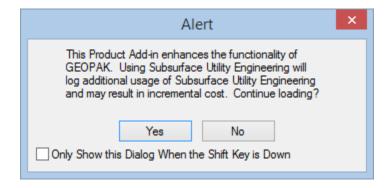
Previous Maintenance Releases - None at this time as this is the base install for the FDOT CADD software, FDOTSS4 install. This section will be updated when Maintenance Releases are deployed.

## **GEOPAK Product Add-Ins**

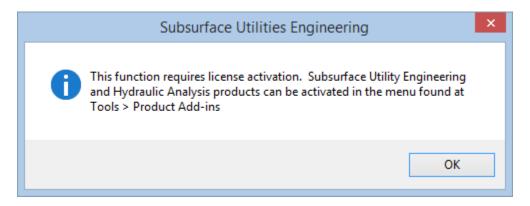
There are now several additional products distributed by Bentley with PowerGEOPAK and the GEOPAK Suite. These products can be activated using the "Tools > Product Add-Ins" menu.



Although distributed with GEOPAK these "Product Add-Ins" are not covered as part of your PowerGEOPAK and the GEOPAK Suite license agreement. If activated, these "Product Add-Ins" will alert the user that activating the selected "Product Add-In" will log additional license usage and may result in additional cost. Pay careful attention to the Alert box shown below, and the potential consequences.



The Subsurface Utility Engineering module has three main functions: It models utilities, does clash detection, and provides enhanced attribution of utility features. The modeling of utilities is provided for in PowerGEOPAK and the GEOPAK Suite licensing. However, the use of tools related to clash detection, or enhanced attribution of utilities will require the SUE Product Add-In" to be activated. If a user tries to utilize he enhanced features a message directing them to the "Tools > Product Add-Ins" menu will appear.



It is strongly recommended that you contact your Bentley account representative to get detailed information on how these additional "Product Add-Ins" are licensed, and to review your account coverage.

The FDOTSS4 workspace utilizes some of the basic modeling functionality provided by the Subsurface Utility Engineering product to model utility lines. The functionality the FDOTSS4 workspace uses is covered by your basic PowerGEOPAK or GEOPAK Suite license. Therefore it is necessary to install the Subsurface Utility Engineering product, but the user's ability to activate the product may be disabled by customizing the MicroStation workspace.

If CADD managers would like to exercise more control over the activation of "Product Add-Ins" to reduce the chance of unexpected costs some minor customization can be done. A customized DGNLIB is provided with the FDOTSS4 workspace which gives CADD managers the ability to disable each of the "Product Add-Ins" using configuration variables.

#### To enable this capability

- 1. Copy the CivilCommands.dgnlib from the \FDOTSS4 \RESOURCES\Dgnlibs\General folder on the server to the C:\Program Files (x86)\Common Files\Bentley Shared\Civil Platform\08.11.09 folder on each client PC.
- 2. Add the following variables to a file named CustomVars.txt file in the \FDOTSS4\Workspace\Users folder on the server.

```
FDOT_DISABLE_DESCARTES=TRUE

FDOT_DISABLE_SUE=TRUE

FDOT_DISABLE_STORMCADUNLIMITED=TRUE

FDOT_DISABLE_CIVILSTORM=TRUE

FDOT_DISABLE_SEWERCAD=TRUE

FDOT_DISABLE_SEWERGEMS=TRUE
```

If the value is set to TRUE the associated "Product Add-In" will be disabled. If it is not set or set to anything other than TRUE the menu option to activate the associated "Product Add-In" will be enabled.

To allow only specific users the ability to enable a product(s) the associated variable(s) can be placed in the bottom of the users **FDOTSS4.UCF** file located in the local **\FDOTSS4\workspace\users** directory on the user's PC.

## **FDOTSS4 Directory Structure**

The installation will create a directory \FDOTSS4 where the user specifies. This directory can be created at the root directory level of the drive (recommended), or under an existing directory folder. FDOT recommends the user install the FDOT software at the default directory level on the drive selected.

Nearly all of the FDOT programs and support files are now located under the \FDOTSS4 directory as described above.

## FDOTSS4 Sub-Directory Structure

APPs (Electronic Delivery Application and Support Files)

CAiCE (CAiCE support files)

GEOPAK (GEOPAK support files)

Help (MS Word, Adobe PDF and HTML format documentation files)

macros (MicroStation macros)

MDLAPPS (MicroStation MDL programs and MDL Support Files)

Menu (FDOT Menu Files)

Project\_Template (Seed FDOT project directory structure)

RESOURCES (Standard resources used by MicroStation in FDOT workspaces)

Temp (Temporary files directory)

VBA (MicroStation VBA Applications)

Workspaces (MicroStation configuration files and toolboxes)

The local FDOTSS4 folder, on the client computers, and all of the associated subdirectories MUST be open for Modify rights.

# **HTM/HTML Help Files**

Help documentation is available in HTML format from the FDOT MENU. To access the help click on the document icon just left of the menu item. (Internet access is required to access help files)

# **MicroStation Configuration Files**

There are 8 configuration files delivered with the FDOTSS4 software:

\FDOTSS4 \Workspace\users\FDOTSS4.ucf

\FDOTSS4 \Workspace\users\GIS.txt

\FDOTSS4 \workspace\users\photogrammetry.txt

\FDOTSS4 \workspace\users\ProjectDir.txt

\FDOTSS4 \workspace\users\Rightofway.txt

\FDOTSS4 \workspace\users\Roadway.txt

\FDOTSS4 \workspace\users\SiteFdot.txt

\FDOTSS4 \workspace\users\Structures.txt

- <u>FDOTSS4.ucf</u> User configuration file for the FDOTSS4 workspace. This file contains configuration variables that are normally user specific such as which FDOT menu is displayed, which project was last opened from MicroStation Manager, and so on. This file can be edited with a text editor, or from within MicroStation's menu option: Workspace > Configuration.
- <u>GIS.txt</u> is a site configuration file for the FDOT Right of Way Menu. The GIS.txt file sets the configuration variables used for the FDOT customizations in Bentley Map. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration submenu which calls this file when the Right of Way Configuration is selected.
- <u>photogrammetry.txt</u> is a site configuration file for the FDOT Photogrammetry Menu. The photogrammetry.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Photogrammetry Configuration is selected.

- <u>ProjectDir.txt</u> is a site configuration file for the all FDOT Menus. The ProjectDir.txt file defines the directories that are created when someone creates a new project from MicroStation Manager.
- <u>rightofway.txt</u> is a site configuration file for the FDOT Right of Way Menu. The rightofway.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Right of Way Configuration is selected.
- <u>roadway.txt</u> is a site configuration file for the FDOT Roadway Menu. The roadway.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Roadway Configuration is selected.
- <u>sitefdot.txt</u> is a site configuration file for the FDOT standard files. The sitefdot.txt file sets all of the standard configuration variables, such as those for cells and custom line styles. It also initiates the FDOT MDL applications. The user configuration file, FDOTSS4.ucf calls this file.
- <u>structures.txt</u> is a site configuration file for the FDOT Structures Menu. The structures.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards > Configuration which calls this file when the Structures Configuration is selected.

# CADpilot.UI – CAD User Interface Components, Menu Bars, Toolboxes, TreeViews, etc.

The release of the FDOTSS4 CADD Software includes CADpilot UI for the deployment of custom user interfaces within MicroStation and AutoCAD. This includes the floating menu toolbar which is used as the primary interface for the FDOTSS4 customized working environment within the host CAD applications.

## Components of CADpilot UI

- Floating toolbars with menus and buttons
- Configuration-based component layering for standards, projects, clients, disciplines, etc.
- Space-saving pop-up command windows for lists, HTML, TreeViews, and browser-based content
- Optional TreeView style interface for navigating pull-down menus which accepts keyboard-driven navigation and selection
- UI Editor to quickly create, manage, and deploy interface components
- Content data files stored as text-based XML
- Distribution licensing available

#### **LICENSING**

Florida Department of Transportation has purchased a distribution license for distributing a locked version of the CADpilot UI application with their workspaces. For more information regarding the licensing terms please read the CADpilot UI EULA (End User License Agreement) located in the CADpilot UI Licensing folder within the FDOT workspace.

The distributed version uses locked content files which cannot be modified by the end user. For a full version of CADpilot UI, which can be used to create and modify your own content, please contact CAD Management Resources at info@cadmanage.com or (207)221-2911.

CADpilot is a registered trademark of CAD Management Resources, Inc. <a href="http://www.cadmanage.com">http://www.cadmanage.com</a>

# **Support and Services Information**

For additional questions regarding this installation, please contact the FDOT CADD Office at (850) 414-4711 or email questions to: cadd.support@dot.state.fl.us .

For updates to the files on this delivery, please check the FDOT CADD Website: http://www.fdot.gov/cadd/